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=> d his

     (FILE 'HOME' ENTERED AT 14:11:25 ON 09 JUN 2005)

     FILE 'REGISTRY' ENTERED AT 14:11:34 ON 09 JUN 2005
L1             1 S 97-72-3/RN

     FILE 'CAPLUS' ENTERED AT 14:12:00 ON 09 JUN 2005
L2           864 S L1
L3           204 S L2 AND "ACETIC ANHYDRIDE"
L4            19 S L3 AND "ISOBUTYRIC ACID"

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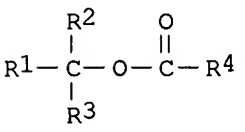
=> d bib abs 1-19

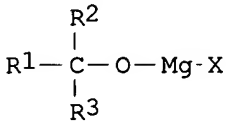
L4 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:84839 CAPLUS
DN 142:113736
TI Preparation of novel esters of tertiary alcohols
IN Beldowicz, Maria; Kakol, Barbara; Kulig-Adamiak, Anna; Dornowski, Tadeusz; Obukowicz, Bozenna; Kaminski, Jaroslaw; Lewicka, Lidia; Kazimierczak, Jerzy
PA Instytut Chemii Przemyslowej im. Prof. Ignacego Moscickiego, Pol.
SO Pol., 7 pp.
CODEN: POXXA7
DT Patent
LA Polish
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI PL 183367	B1	20020628	PL 1996-314863	19960619
PRAI PL 1996-314863		19960619		

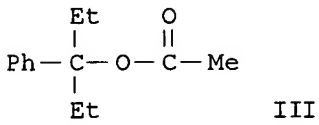
GI



I



II



III

AB The title compds. I [R1-R3 = alkyl, Ph, alkylphenyl; R4 = alkyl; with provisos], potentially useful as flavorants in cosmetic and other industries, were prepared in one-pot synthesis by reacting freshly prepared Grignard reagent R1MgX [X = halo] with ketone R2C(O)R3 followed by reaction of the intermediate II with carboxylic acid derivative R4C(O)Y [Y = halo, OC(O)R; R = alkyl]. Thus, reacting Mg with PhBr in THF followed by addition of di-Et ketone and subsequently Ac2O afforded 90% III. The prepared compds. I demonstrated characteristic flavors which were evaluated on 1 through 8 point flavor scale.

L4 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:875971 CAPLUS
DN 141:351760
TI Dehydration process for making isobutyric anhydride from **isobutyric acid** and **acetic anhydride**
IN Paul, Jean-Michel; Busca, Patrick
PA Atofina, Fr.
SO Eur. Pat. Appl., 6 pp.
CODEN: EPXXDW
DT Patent
LA French
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 1468980	A1	20041020	EP 2004-290802	20040325

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR

	FR 2853900	A1	20041022	FR 2003-4785	20030416
	US 2005014974	A1	20050120	US 2004-824618	20040415
	JP 2004315536	A2	20041111	JP 2004-121366	20040416
PRAI	FR 2003-4785	A	20030416		

AB A dehydration process is presented for making isobutyric anhydride from **isobutyric acid** and **acetic anhydride** with distillation of the acetic acid byproduct.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:673197 CAPLUS
DN 141:182324
TI Substituted clonidine derivatives. I. 3,5-Dichloro-4-(imidazolidin-2-ylideneamino)benzonitrile and 3,5-dichloro-4-(1,3-diisobutyrylimidazolidin-2-ylideneamino)benzonitrile
AU Elssfah, E. M.; Chinnakali, K.; Fun, H. K.; Mathison, I. W.; Gan, E. K.; Zubaid, M.; Sam, T. W.; Khoo, K. S.
CS X-ray Crystalography Unit, School of Physics, Universiti Sains Malaysia, Penang, 11800 USM, Malay.
SO Acta Crystallographica, Section C: Crystal Structure Communications (1999), C55(7), iii, IUC9900066/1-2
CODEN: ACSCEE; ISSN: 0108-2701
URL: http://journals.iucr.org/c/issues/1999/07/00/issconts.html
PB Munksgaard International Publishers Ltd.
DT Journal
LA English
AB In the title compds., C10H8C12N4, (I), and C18H20C12N4O2, (II), the dihedral angle between the imidazolidine and Ph rings are 67.7(1) and 70.34(9)°, resp. In (I), the imidazolidine ring adopts a half-chair conformation, whereas in (II), it is in a flattened envelope conformation. In (I), the glide related mols. are linked by N2-H2A···N1(x, 1/2-y, z1/2) H bonds with an N···N distance of 2.848(4) Å to form an infinite chain along the c axis with the Ph rings stacked at a perpendicular distance of 3.633(5) Å. In (II), a weak C-H···N intramol. H bond exists between C11 and N1, with a C···N distance of 2.902(4) Å. Crystallog. data and atomic coordinates are given.

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:657919 CAPLUS
DN 137:195593
TI Methods for the treatment of neuropathic pain by aryl nitrone compounds
IN Waterbury, David; Wood, Paul L.; Khan, M. Amin; Upasani, Ravindra B.
PA Centaur Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 82 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002065993	A2	20020829	WO 2002-US758	20020108
	WO 2002065993	A3	20021107		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,

PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

	US 2002165274	A1	20021107	US 2002-43659	20020108
	US 6835754	B2	20041228		
	US 2004209958	A1	20041021	US 2004-843298	20040512
PRAI	US 2001-260469P	P	20010108		
	US 2002-43659	A3	20020108		

OS MARPAT 137:195593

AB Methods are disclosed for the treatment of neuropathic pain by aryl nitrone compds. Method involves administration of an effective neuropathic pain-treating dose of a pharmaceutical composition (Markush structures are given). Substituted aryl nitrone compds. are useful as therapeutics for neuropathic pain conditions in mammals.

L4 ANSWER 5 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:169679 CAPLUS
DN 136:233214
TI Fiber-reinforced composite materials with good biodegradability
IN Takeishi, Hiromasa; Shibata, Mitsuhiro; Yosomiya, Tatsunori
PA Chiba Institute of Technology, Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002069208	A2	20020308	JP 2000-258698	20000829
PRAI	JP 2000-258698		20000829		

AB The composite materials comprises surface-treated plant cellulose fibers with OH group converted into esters and biodegradable thermoplastic resins. Surface treating Manila hemp fibers with isobutyric anhydride and pyridine, melt kneading 10 parts treated Manila hemp fibers with 90 parts Biopol, and injection molding gave test pieces with flexural strength 26.3 MPa and flexural modulus 1460 MPa.

L4 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:167971 CAPLUS
DN 134:207727
TI Preparation of quinolinones and related bicyclic compounds as androgen and progesterone receptor modulators.
IN Zhi, Lin; Tegley, Christopher; Pio, Barbara; Arjan van Oeveren, Cornelis; Motamedi, Mehrnouch; Martinborough, Esther; West, Sarah; Higuchi, Robert; Hamann, Lawrence; Farmer, Luc
PA Ligand Pharmaceuticals Incorporated, USA
SO PCT Int. Appl., 356 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

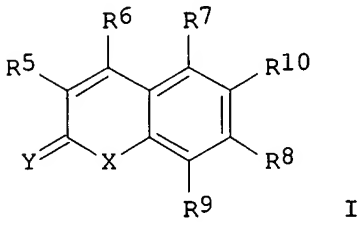
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001016108	A2	20010308	WO 2000-US23585	20000825
	WO 2001016108	A3	20011220		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,

YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US	6566372	B1	20030520	US 2000-649466	20000824
CA	2384435	AA	20010308	CA 2000-2384435	20000825
BR	2000013653	A	20020514	BR 2000-13653	20000825
EP	1212303	A2	20020612	EP 2000-959507	20000825
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
TR	200200508	T2	20020923	TR 2002-200200508	20000825
JP	2003508387	T2	20030304	JP 2001-519677	20000825
ZA	2002001053	A	20030528	ZA 2002-1053	20020206
NO	2002000912	A	20020429	NO 2002-912	20020225
BG	106539	A	20021031	BG 2002-106539	20020321
US	2003130505	A1	20030710	US 2002-299909	20021118
PRAI US	1999-150987P	P	19990827		
US	2000-649466	A3	20000824		
WO	2000-US23585	W	20000825		

OS MARPAT 134:207727
GI



I

AB Title compds., e.g. [I; R1, R2 = COR3, CSR3, SO2R3, NO, NR3R4, alkyl, alkenyl, haloalkyl, haloalkenyl, haloalkynyl, heteroalkyl, heteroalkenyl, heteroalkynyl, etc.; R1R2 = atoms to form (substituted) heterocyclyl; R3, R4 = H, (substituted) alkyl, alkenyl, alkynyl, haloalkyl, heteroalkyl, heteroaryl, aryl; R5 = H, F, Cl, Br, iodo, OR3, SR3, NR3R4, alkyl, haloalkyl, heteroalkyl; R6 = F, Cl, Br, iodo, Me, CF3, CHF2, cyano, CF2Cl, CF2OR3, OR3, SOR3, CO2R3, NR3R4, (substituted) alkyl, alkenyl, alkynyl, haloalkyl, heteroalkyl, etc.; R7, R8 = H, F, Cl, Br, iodo, cyano, OR3, NR3R4, SR3, SOR3, NR3COR4, alkyl, haloalkyl, heteroalkyl, etc.; R9 = H, F, Cl, iodo, OR3, NR3R4, SR3, SOR3, SO2R3, alkyl, haloalkyl, heteroalkyl; R10 = NR1R2, (substituted) heterocyclyl; Y = O, S, NR3, NOR3, CR3R4], were prepared Thus, 6-amino-4-trifluoromethyl-2(1H)-quinolinone (preparation given) was stirred with propionaldehyde and NaBH3CN in MeOH to give 70-95% 6-propylamino-4-trifluoromethyl-2(1H)-quinolinone. The latter showed androgen receptor agonist activity with a potency of 27 nM. A drug composition is given.

L4 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:545441 CAPLUS
DN 131:207755
TI Material and method for manufacture of porous membrane for integration of large-scale integrated circuit
IN Aoi, Nobuo
PA Matsushita Electric Industrial Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DT Patent

LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11233506	A2	19990827	JP 1998-29431	19980212
	JP 3571522	B2	20040929		
	US 6194029	B1	20010227	US 1999-243491	19990203
	US 6319854	B1	20011120	US 2000-670698	20000928
PRAI	JP 1998-29431	A	19980212		
	US 1999-243491	A1	19990203		

AB The material for manufacture of the porous membrane comprises a solution containing (A) silanol condensate particles and (B) (a) an alkyl-, halo-, OH-, or polar group (composed of C and heteroatom)-containing organic acid, (b) ≥2 OH-containing organic acids, (c) ≥1 OH-containing organic acid and ≥1 polar group-containing organic acid, or (d) an organic acid anhydride. The porous membrane is manufactured by applying the above material on a substrate, followed by heating it. The organic acid catalyzes condensation of silanol condensate particles to improve the mech. strength of the membrane without blocking of the pores.

L4 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:460864 CAPLUS
DN 131:199342
TI Nonordinary destruction of aliphatic aldehydes C2-C4 in solutions of giant palladium clusters Pd-561
AU Gladii, S. L.; Starchevskii, M. K.; Lastovyak, , Yu. V.; Pezderskii, Yu. A.; Vargaftik, M. N.; Moiseev, I. I.
CS Borislavsk. Naukovo-Dosl. Inst. "Sintez", Borislav, Ukraine
SO Dopovidi Natsional'noi Akademii Nauk Ukraini (1998), (1), 174-178
CODEN: DNAUFL; ISSN: 1025-6415
PB Prezidiya Natsional'noi Akademii Nauk Ukraini
DT Journal
LA Ukrain/Ukrain
AB Giant palladium cluster (Pd561) solns. are found to catalyze at 333 K and 0.1 MPa the oxidative destruction of aliphatic aldehydes C2-C4 yielding carbon dioxide and hydrocarbons. Acetaldehyde is converted to CO2 and CH4. Destruction of propanal, butanal and i-butanal yields CO2 and olefins - accordingly, ethylene and propene. A reaction mechanism suggested includes the cleavage of the α-C-C bond of RCH2-C=O coordinated with a Pd-atom.

L4 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:352133 CAPLUS
DN 129:54296
TI Preparation of N-acyl nitrogen-containing cyclic ketones
IN Ishikawa, Masahiro; Koike, Hitoshi
PA Yuki Gosei Kogyo Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10147571	A2	19980602	JP 1996-323615	19961119
PRAI	JP 1996-323615		19961119		

OS CASREACT 129:54296; MARPAT 129:54296
AB RCOA (A = 4- or 3-piperidone residue, 3-pyrrolidone residue; R = alkyl, aryl) are prepared by reaction of PhCH2A (A = same as above) with RCO2COR (R = same as above) in the presence of H donors or H and Pd catalysts. N-benzyl-4-piperidone was treated with Ac2O in PhMe in the presence of

Pd/C under 5 kg/cm2 H at 40° for 30 min to give 95% N-acetyl-4-piperidone.

L4 ANSWER 10 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1995:980696 CAPLUS
DN 124:175094
TI On the potential of zeolites to catalyze aromatic acylation with carboxylic acids
AU Gunnewegh, E. A.; Downing, R. S.; Van Bekkum, H.
CS Laboratory Organic Chemistry and Catalysis, Delft University Technology, Delft, 2628 BL, Neth.
SO Studies in Surface Science and Catalysis (1995), 97(Zeolites: A Refined Tool for Designing Catalytic Sites), 447-52
CODEN: SSCTDM; ISSN: 0167-2991
PB Elsevier
DT Journal
LA English
AB A symposium. The intramol. acylation of 4-phenylbutyric acid was investigated as a model reaction for Friedel-Crafts acylation catalyzed by zeolites in the liquid phase. This reaction is catalyzed by zeolite H-Beta in 4-chlorotoluene as solvent. The catalytic ability of H-Beta was demonstrated by the fact that at reflux temperature the total turnover number (TON) was found to be 35. However, the acylation of toluene or butylbenzene with carboxylic acids was slow; the unbalanced adsorption equilibrium between the two reactants on the H-Beta (Si/Al=12) may be a contributing factor in this case. The acylation of anisole by carboxylic acids or acid anhydrides however, was readily catalyzed by zeolite H-Beta.

L4 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1995:655207 CAPLUS
DN 123:56502
TI Method for manufacture of sucrose fatty acid esters with high degree of substitution
IN Takamura, Yasuyuki; Murakami, Osamu
PA Dai Ichi Kogyo Seiyaku Co Ltd, Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07101974	A2	19950418	JP 1993-250258	19931006
PRAI	JP 1993-250258		19931006		

AB The title sucrose fatty acid esters are prepared by reaction of sucrose and/or a sucrose fatty acid ester with a fatty acid anhydride, wherein the reactants are dissolved in a solvent, made alkali, and reacted under an inert gas. The preferred solvent is a basic organic solvent which is used at ≥1.0 mol/1.0 mol fatty acid anhydride. The preferred reaction temperature is ≥30 to <120°. This process gives sucrose fatty acid esters with high degree of substitution and markedly good hue. A basic organic solvent makes the reaction system alkali, prevents coloration due to the thermal decomposition of sucrose fatty acid esters, dissolves sucrose and/or sucrose fatty acid esters to make the reaction system homogeneous and improve the reaction rate, serves as an esterification catalyst, and eliminates the need of using an alkali metal hydroxide or carbonate, which also results in preventing coloration. Carrying out the reaction under an inert gas prevents coloration due to the oxidation of sucrose. Thus, sucrose 0.1, Ac2O 1.6, and pyridine 4.8 mol were placed in a flask and N was bubbled at 10 mL/min into the mixture with stirring to make the O concentration 0.1 mg-O/L in the gas phase. The esterification was carried out, while bubbling N into the mixture at 5 mL/min and the reaction

mixture was distilled in vacuo at ≤3 mmHg and 60° to remove pyridine, Ac2O, and formed AcOH, and stirred with 200 g toluene and 300 g 0.5 weight% aqueous NaHCO3 at 50° for 30 min followed by separating the toluene layer, washing it with H2O, and distilling toluene at 60° at ≤3 mmHg to give sucrose acetate with 7.98 degree of substitution and APHA (American Public Health Association) color scale 200.

L4 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1995:490129 CAPLUS
DN 123:9071
TI Manufacture of carbamate group-containing esters
IN Jaawarudo, Efu Gurahe; Arutaa, Rakobitsutsu
PA Dainippon Ink & Chemicals, Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 07017940	A2	19950120	JP 1993-164552	19930702
PRAI JP 1993-164552		19930702		

OS CASREACT 123:9071; MARPAT 123:9071
AB Treating carbamate-containing alcs. HOXO2CNHR2 (R2 = H, C1-18 organic group; X =
C1-12 difunctional group) with acid anhydrides (R1CO)2O (R1 = same as R2) in the presence of a base catalyst gives title esters R1CO2XO2CNHR2 or treating HOXNHCO2R2 with (R1CO)2O give R1CO2XNHCO2R2. Thus, treating hydroxyethylurethane with Ac2O in the presence of NaOMe at 80-85° gave .apprx.91.5% 2-carbamoyloxyethyl acetate.

L4 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1994:455895 CAPLUS
DN 121:55895
TI O-derivatized alginic acid antigens
IN Pier, Gerald
PA Brigham and Women's Hospital, Inc., USA
SO PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9408617	A1	19940428	WO 1993-US9909	19931015
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9454057	A1	19940509	AU 1994-54057	19931015
PRAI US 1992-962480	A	19921016		
WO 1993-US9909	W	19931015		

AB An O-derivatized alginic acid antigen capable of eliciting opsonizing antibodies in vivo is disclosed. The O-derivatized antigen shows enhanced antigenicity and immunogenicity relative to native, non-O-derivatized alginic acid antigens, particularly the mucoid exopolysaccharide antigen of Pseudomonas aeruginosa. Pharmaceutical compns. containing the O-derivatized antigen of the invention are also described. The invention also pertains to use of the compns. as vaccines, in immunodiagnostic assays, and in methods for producing monoclonal antibodies reactive against the antigen. Methods for forming O-derivatized alginic acid antigens of the invention are described. A non-O-derivatized starting material is reacted in a solvent with an alkyl anhydride derived from a short chain fatty acid (e.g. propionic, isobutyric, or butyric acid).

L4 ANSWER 14 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1993:602807 CAPLUS
DN 119:202807
TI Cobalt(II)-catalyzed reaction of aldehydes with **acetic anhydride** under an oxygen atmosphere: scope and mechanism
AU Bhatia, Beena; Punniyamurthy, T.; Iqbal, Javed
CS Dep. Chem., Indian Inst. Technol., Kanpur, 208016, India
SO Journal of Organic Chemistry (1993), 58(20), 5518-23
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
OS CASREACT 119:202807
AB The reaction of aldehydes with **acetic anhydride** in the presence of catalytic cobalt(II) chloride under an oxygen atmospheric at ambient temperature is dependent upon the reaction medium. Aliphatic aldehydes react in acetonitrile to give 1,2-diones whereas the aromatic aldehydes are acylated to yield the corresponding acylals. On the other hand, carboxylic acids are obtained from aliphatic and aromatic aldehydes by conducting the reaction in dichloromethane or benzene. Cobalt(II) chloride in acetonitrile catalyzes the conversion of aliphatic aldehydes to the corresponding anhydrides in the absence of **acetic anhydride** whereas aromatic aldehydes remain largely unaffected under these conditions. A preliminary mechanistic study in three different solvents (i.e. acetonitrile, dichloroethane, and DMF) has revealed that in acetonitrile and in the presence of **acetic anhydride**, aliphatic aldehydes behave differently than aromatic aldehydes. Some trapping expts. using Me acrylate and stilbene have been conducted to demonstrate the occurrence of an acyl cobalt and peroxyacyl cobalt intermediate during these reactions.

L4 ANSWER 15 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1992:614970 CAPLUS
DN 117:214970
TI Method for purification of carboxylic acids and anhydrides
IN Zoeller, Joseph Robert; Moncier, Regina Michelle
PA Eastman Kodak Co., USA
SO PCT Int. Appl., 13 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

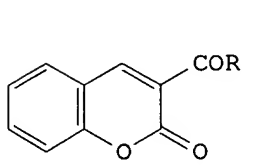
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9212954	A1	19920806	WO 1992-US631	19920127
	W: CA, JP, KR				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
	US 5175363	A	19921229	US 1991-646029	19910128
	CA 2098293	AA	19920729	CA 1992-2098293	19920127
	EP 569492	A1	19931118	EP 1992-905057	19920127
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
	JP 06505257	T2	19940616	JP 1992-505713	19920127
PRAI	US 1991-646029	A	19910128		
	WO 1992-US631	W	19920127		

AB A method for reducing the amount of olefinic impurity in the title C2-8 carboxylic acids and C4-16 anhydrides comprises contacting them with a strong acidic resin. A sample of AcOH contaminated with 221 ppm 1-octene was added to Amberlyst-15, the mixture refluxed for 3 h to give AcOH containing only 15 ppm 1-octene.

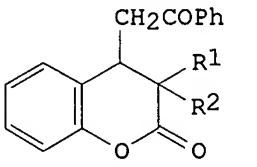
L4 ANSWER 16 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1992:135528 CAPLUS

DN 116:135528
TI Performance-oriented packaging standards; changes to classification, hazard communication, packaging and handling requirements based on UN standards and agency initiative
CS United States Dept. of Transportation, Washington, DC, 20590-0001, USA
SO Federal Register (1990), 55(246), 52402-729, 21 Dec 1990
CODEN: FEREAC; ISSN: 0097-6326
DT Journal
LA English
AB The hazardous materials regulations under the Federal Hazardous Materials Transportation Act are revised based on the United Nations recommendations on the transport of dangerous goods. The regulations cover the classification of materials, packaging requirements, and package marking, labeling, and shipping documentation, as well as transportation modes and handling, and incident reporting. Performance-oriented stds. are adopted for packaging for bulk and nonbulk transportation, and SI units of measurement generally replace US customary units. Hazardous material descriptions and proper shipping names are tabulated together with hazard class, identification nos., packing group, label required, special provisions, packaging authorizations, quantity limitations, and vessel stowage requirements.

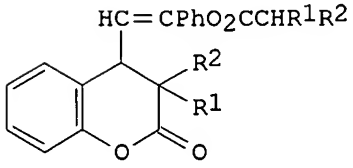
L4 ANSWER 17 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1988:406370 CAPLUS
DN 109:6370
TI Thermal transformations of some 3-acyl-2-oxo-2H-1-benzopyrans with acid anhydrides
AU Bodzhilova, A.; Ivanov, Kh.
CS Fac. Chem., Univ. Sofia, Sofia, 1126, Bulg.
SO Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1987), 26B(8), 731-5
CODEN: IJSBDB; ISSN: 0376-4699
DT Journal
LA English
OS CASREACT 109:6370
GI



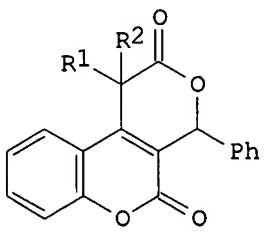
I



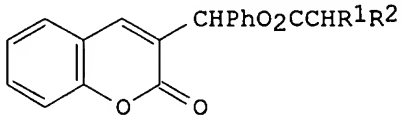
II



III



IV



V

AB The reaction of 3-benzoyl- and 3-acetyl-2-oxo-2H-1 benzopyrans I (R = Ph, Me) with acid anhydrides in the presence of AcONa or Et3N was studied. Thus, with propionic, butyric and **isobutyric acid** anhydrides, I (R = Ph) affords the rearrangement products II and III (R1 = H, R2 = Me, Et; R1 = R2 = Me), dilactones IV and benzyl ester V.

L4 ANSWER 18 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1977:71270 CAPLUS
DN 86:71270
TI Kinetics and mechanism of the reaction of aliphatic nitriles with carboxylic acids
AU Zil'berman, E. N.; Navolokina, R. A.; Minchuk, F. F.; Danov, S. M.; Gromova, G. V.
CS Gor'k. Politekh. Inst. im. Zhdanova, Dzerzhinsk, USSR
SO Izvestiya Vysshikh Uchebnykh Zavedenii, Khimiya i Khimicheskaya Tekhnologiya (1976), 19(9), 1395-8
CODEN: IVUKAR; ISSN: 0579-2991
DT Journal
LA Russian
AB Rate consts. and activation parameters were determined for the reaction of RCN with RCO2H (R = Me, Et, Pr, Me2CH) to give RCONH2 and (RCO)2O and for the further reaction of these products to give (RCO)2NH and RCO2H. A 4-center cyclic transition state was suggested for the 2nd step.

L4 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1952:57248 CAPLUS
DN 46:57248
OREF 46:9565f-g
TI Function of pyridine in the carboxylic acid-thionyl chloride system
AU Gerrard, W.; Thrush, A. M.
CS Northern Polytech., London
SO Journal of the Chemical Society, Abstracts (1952) 741-2
CODEN: JCSAAZ; ISSN: 0590-9791
DT Journal
LA Unavailable
AB The addition of 0.5 mol. SOCl2 to 1 mol. AcOH and 1 mol. C5H5N in ether at -10° gives an immediate precipitate which appears to be an equimol. mixture of C5H5N.HCl and C5H5N.HOSOCl; the ether yields 97% Ac2O. In the same way (iso-PrCO)2O, (iso-BuCO)2O, and (C6H13CO)2O were obtained in 98, 99, and 97% yields. A postulated mechanism involves the 4-center broadside approach of the reacting mols.

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